



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

AUG 20 2004

DOT-E 13350
(THIRD REVISION)

EXPIRATION DATE: April 30, 2006

1. GRANTEE: The Boeing Company
Kennedy Space Center, FL

(See Appendix A of this exemption for a list of additional grantees)

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of Space Shuttle Orbiter Auxiliary Power Units containing the residue of Hydrazine, anhydrous. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.201 in that non-specification packaging is not authorized, and § 172.101 Hazardous Materials Table, Column (9B) in that the quantity limitation may not be exceeded, except as specified herein.

5. BASIS: This exemption is based on the application of the Boeing Company dated March 17, 2004, submitted in accordance with § 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

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Hazardous Materials Description			
Proper shipping name	Hazard Class/ Division	Identification Number	Packing Group
Hydrazine, anhydrous	8	UN2029	I

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Each of the Space Shuttle Orbiter Auxiliary Power Units (APU) conforming to Hamilton Sunstrand part number 763759 must be packaged as described in the Boeing Company application on file with the Office of Hazardous Materials Exemptions and Approvals. The outer package is a 198-gallon type 304 stainless steel drum, with attached forklift pockets. The approximate dimensions of the drum are 36 inches in diameter and 45 inches in height with a wall thickness of 0.0598 inches. The cover is attached to the body of the drum with a bolted lock-ring. The drum will contain one APU packed as described below:

(1) The APU must be wrapped with a hydrazine compatible wrap and securely fastened to a shipping bracket. The edges of the wrap must be securely taped to the shipping bracket.

(2) The APU must be securely bolted to a metal protective frame. Desiccant must be bagged and taped to the bottom of the protective frame.

(3) The APU, desiccant, frame and shipping bracket must be completely wrapped in two layers of polyethylene wrap. Before sealing each layer they must be purged with gaseous nitrogen and purged with a vacuum.

(4) The sealed APU is placed into the drum, which is cushioned top and bottom with polyethylene foam as well as a center ring of polyethylene. The APU in the protective frame must be restrained securely within the drum to prevent movement during transportation.

b. OPERATIONAL CONTROLS -

(1) Transportation is authorized only between the Kennedy Space Center in Florida and the Hamilton Sundstrand Facility in Rockford, Illinois; and

(2) Each APU may contain only a residue of hydrazine and must be filled with nitrogen at ambient pressure and sealed prior to shipment.

8. SPECIAL PROVISIONS:

a. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

b. Each outer package must be marked "DOT-E 13350" in accordance with § 172.302(c).

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo aircraft only.10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each aircraft and motor vehicle used to transport packages covered by this exemption. The shipper must furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

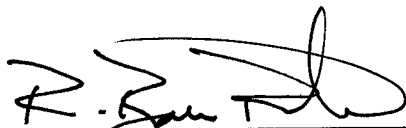
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:



Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

AUG 20 2004

(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.
Attention: DHM-31.

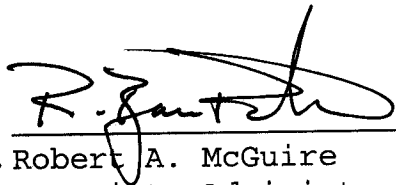
Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: DB/dl

AUG 20 2004

The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
United Space Alliance Kennedy Space Center, FL	Aug 19, 2004	AUG 20 2004	Apr 30, 2006



Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

AUG 20 2004

Date